

I've a rather simple solution to the provisioning of broadband via the traditional telephone network (PSTN: Public Switched Telephone Network metamorphoses into the PSDN: Public Switched Digital Network).

First, have the FCC (and state PUCs) put their heads together and figure out what would be just compensation to the RBOCs for their COs (perhaps the profits they've already made from approximately a century of government enforced "natural monopoly"), then acquire them via a process that will probably need to be eminent domain.

Turn around and sell them (the COs) to multiple companies that agree to limit themselves to the CO services and facilities business only. It might be useful to limit the number of CO operating companies allowed to do business within any given LATA, but it should certainly be greater than one.

Then allow local loop vendors (again, it might be wise to place an upper limit on the number of vendors within a LATA) equal access to all the CO facilities.

All IXC vendors will also be allowed equal access to co-locate POPs within the COs.

Cable TV, ISPs, HDTV, interactive video, and other types of content providers will also have equal access to the COs as needed.

All vendors must be able to interconnect to one another via an open standard (such as SS7/CCS).

This is a very basic recommendation that would allow broadband to become ubiquitous using the installed copper cabling initially.

Eventually, fiber could be run to a PON (FTTC) and the run to a home or business would be via existing copper wires. Phone service and moderate broadband data (BRI (via two pairs of wire), or PRI-E1 (allows for some video)) could be accommodated.

Over time, FTTH would allow server farms, video conferencing, HDTV, etc... to originate/locate anywhere a body might want!

My two cents worth...

Some acronyms explained:

FCC: Federal Communications Commission (Federal Regulators).

PUC: Public Utility Commission (State Regulators).

RBOC: Regional Bell Operating Company (Verizon, SBC, Qwest, Bell South).

CO: Central Office (Local Phone Co. building).

LATA: Local Access and Transport Area (a.k.a., Service Area).

IXC: InterExchange Carrier (a.k.a., Long Distance Company).

POP: Point of Presence (where Long Distance connects to the Local Telephone Co.).

ISP: Internet Service Providers (AOL, MSN, etc...).

HDTV: High Definition TeleVision.

SS7/CCS: Signal System 7/Common Channel Signaling (how your call gets there).

PON: Passive Optical Network (lower cost fiber optic connection).
FTTC: Fiber To The Curb (uses fiber optic communication, but not all the way home).
FTTH: Fiber To The Home/Business (don't yet need new wires inside the house).
BRI: Basic Rate ISDN (faster-than-a-modem, dial-up data and telephone lines).
PRI: Primary Rate ISDN (faster than DSL or Cable Modem, plus telephone lines).
ISDN: Integrated Services Digital Network (20 year old, unloved by RBOCs, digital service that should be, but probably isn't, available in your neighborhood).
E1: European equivalent of a T1 (up to 2 Megabit per second for data, voice or video connections in any combination desired).